

D. Clark

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NOV 15 2000

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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/245,603A

DATE: 11/03/2000  
TIME: 15:41:24

Input Set : A:\PTO.txt  
Output Set: N:\CRF3\11032000\I245603A.raw

3 <110> APPLICANT: Curiel, David T.  
4 Krasnykh, Victor N.  
5 Dmitriev, Igor  
7 <120> TITLE OF INVENTION: Adenovirus Vector Containing A Heterologous Peptide  
8 Epitope in the HI Loop of the Fiber Knob  
W--> 9 <130> FILE REFERENCE: D6080  
W--> 10 <140> CURRENT APPLICATION NUMBER: 09/245,603A  
11 <141> CURRENT FILING DATE: 1999-02-05  
12 <150> PRIOR APPLICATION NUMBER: US 60/099,801  
14 <151> PRIOR FILING DATE: 1998-09-10  
W--> 16 <160> NUMBER OF SEQ ID: 17  
18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 38  
20 <212> TYPE: DNA  
21 <213> ORGANISM: artificial sequence  
W--> 22 <220> FEATURE:  
23 <221> NAME/KEY: primer\_bind  
24 <223> OTHER INFORMATION: Forward primer F1 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.  
W--> 26 <400> SEQUENCE: 1  
27 taaggatccg gtgccattac agtaggaaac aaaaataaa 38  
29 <210> SEQ ID NO: 2  
30 <211> LENGTH: 43  
31 <212> TYPE: DNA  
32 <213> ORGANISM: artificial sequence  
W--> 33 <220> FEATURE:  
34 <221> NAME/KEY: primer\_bind  
35 <223> OTHER INFORMATION: Reverse primer R1 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.  
W--> 37 <400> SEQUENCE: 2  
38 catagatgtatcg ttagtgttac aggttagtt ttg 43  
40 <210> SEQ ID NO: 3  
41 <211> LENGTH: 42  
42 <212> TYPE: DNA  
43 <213> ORGANISM: artificial sequence  
W--> 44 <220> FEATURE:  
45 <221> NAME/KEY: primer\_bind  
46 <223> OTHER INFORMATION: Forward primer F2 used to generate a gene encoding  
the Ad5 fiber knob domain with the HI loop deleted.  
W--> 48 <400> SEQUENCE: 3  
49 gtaacactaa cgatatcgc atactctatg tcattttcat gg 42  
51 <210> SEQ ID NO: 4  
52 <211> LENGTH: 41  
53 <212> TYPE: DNA  
54 <213> ORGANISM: artificial sequence  
W--> 55 <220> FEATURE:  
56 <221> NAME/KEY: primer\_bind

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57 <223> OTHER INFORMATION: Reverse primer R2 used to generate a gene encoding  
 58 the Ad5 fiber knob domain with the HI loop deleted.

W--> 59 <400> SEQUENCE: 4  
 60 cccaaagctta caattgtaaaa ataaaacacgt tgaaaacataa c 41  
 62 <210> SEQ ID NO: 5  
 63 <211> LENGTH: 63  
 64 <212> TYPE: DNA  
 65 <213> ORGANISM: artificial sequence

W--> 66 <220> FEATURE:  
 67 <223> OTHER INFORMATION: Oligonucleotide annealed with SEQ ID NO: 6 to form a  
 68 duplex and cloned into EcoRV-digested pQE.KNOBDHI.

W--> 69 <400> SEQUENCE: 5  
 70 tacactaaac ygtacccagg aaacaggaga cacaactgac tacaaggacg acgatgacaa 60  
 71 gcc 63  
 73 <210> SEQ ID NO: 6  
 74 <211> LENGTH: 63  
 75 <212> TYPE: DNA  
 76 <213> ORGANISM: artificial sequence

W--> 77 <220> FEATURE:  
 78 <223> OTHER INFORMATION: Oligonucleotide annealed with SEQ ID NO: 5 to form a  
 79 duplex and cloned into EcoRV-digested pQE.KNOBDHI.

W--> 80 <400> SEQUENCE: 6  
 81 ggcttgcatt cgtcgccctt gtatgcattt gtgtctccgt tttccctgggt accgttttagt 60  
 82 gta 63  
 84 <210> SEQ ID NO: 7  
 85 <211> LENGTH: 29  
 86 <212> TYPE: DNA  
 87 <213> ORGANISM: artificial sequence

W--> 88 <220> FEATURE:  
 89 <223> OTHER INFORMATION: Oligonucleotide used in synthetic duplex which  
 90 encodes MetHis6Lys.

W--> 91 <400> SEQUENCE: 7  
 92 gatccatgc tcaccatcac catcacaag 29  
 94 <210> SEQ ID NO: 8  
 95 <211> LENGTH: 29  
 96 <212> TYPE: DNA  
 97 <213> ORGANISM: artificial sequence

W--> 98 <220> FEATURE:  
 99 <223> OTHER INFORMATION: Oligonucleotide used in synthetic duplex which  
 100 encodes MetHis6Lys.

W--> 101 <400> SEQUENCE: 8  
 102 cgcgcattgtt atgggtatgg tgatgcatt 29  
 104 <210> SEQ ID NO: 9  
 105 <211> LENGTH: 16  
 106 <212> TYPE: DNA  
 107 <213> ORGANISM: artificial sequence

W--> 108 <220> FEATURE:  
 109 <223> OTHER INFORMATION: An NdeI-SwaI linker ligated to plasmid pTG3602 after  
 110 partial digestion of the plasmid with NdeI.

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W--> 111 <400> SEQUENCE: 9
112 tacccattta aatggg 16
114 <210> SEQ ID NO: 10
115 <211> LENGTH: 66
116 <212> TYPE: DNA
117 <213> ORGANISM: artificial sequence
W--> 118 <220> FEATURE:
119 <223> OTHER INFORMATION: Oligonucleotide in duplex cloned into EcoRV site
120 of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.
W--> 121 <400> SEQUENCE: 10
122 cacactaaac ggtacacagg aaacaggaga cacaacttgt gactgcccgcg gagactgttt 60
123 ctgccc 66
125 <210> SEQ ID NO: 11
126 <211> LENGTH: 66
127 <212> TYPE: DNA
128 <213> ORGANISM: artificial sequence
W--> 129 <220> FEATURE:
130 <221> NAME/KEY: primer_bind
131 <223> OTHER INFORMATION: Oligonucleotide in duplex cloned into EcoRV site
132 of plasmid pQE.KNOBDHI generating pQE.KNOB.RGDHI.
W--> 133 <400> SEQUENCE: 11
134 gggcagaaac agtctccgcg gcagtcacaa gttgtgtctc ctgtttccctg tgtaccgttt 60
135 agtgtg 66
137 <210> SEQ ID NO: 12
138 <211> LENGTH: 41
139 <212> TYPE: DNA
140 <213> ORGANISM: artificial sequence
W--> 141 <220> FEATURE:
142 <223> OTHER INFORMATION: Oligonucleotide in synthetic duplex used to
143 replace 41 bp PacI-ClaI-fragment in pcDNA.Luc,
144 generating pcLucPCL.
W--> 145 <400> SEQUENCE: 12
146 caaatacaaa ggatatcagg tggcccccgc tgaattggag t 41
148 <210> SEQ ID NO: 13
149 <211> LENGTH: 45
150 <212> TYPE: DNA
151 <213> ORGANISM: artificial sequence
W--> 152 <220> FEATURE:
153 <223> OTHER INFORMATION: Oligonucleotide in synthetic duplex used to
154 replace 41 bp PacI-ClaI-fragment in pcDNA.Luc,
155 generating pcLucPCL.
W--> 156 <400> SEQUENCE: 13
157 cgactccaaat tcagcggggg ccacctgata tcctttgtat ttgat 45
159 <210> SEQ ID NO: 14
160 <211> LENGTH: 13
161 <212> TYPE: PRT
162 <213> ORGANISM: artificial sequence
W--> 163 <220> FEATURE:
164 <223> OTHER INFORMATION: Amino acid sequence deleted from the HI loop of

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165 the fiber knob domain and replaced with a  
166 unique EcoRV site.  
W--> 167 <400> SEQUENCE: 14  
168 Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro  
169 5 10  
171 <210> SEQ ID NO: 15  
172 <211> LENGTH: 8  
173 <212> TYPE: PRT  
174 <213> ORGANISM: artificial sequence  
W--> 175 <220> FEATURE:  
176 <223> OTHER INFORMATION: Amino acid sequence of the FLAG octapeptide.  
W--> 177 <400> SEQUENCE: 15  
178 Asp Tyr Lys Asp Asp Asp Asp Lys  
179 5  
181 <210> SEQ ID NO: 16  
182 <211> LENGTH: 9  
183 <212> TYPE: PRT  
184 <213> ORGANISM: artificial sequence  
W--> 185 <220> FEATURE:  
186 <223> OTHER INFORMATION: Amino acid sequence of a RGD peptide incorporated  
187 into the region of the fiber gene within the HI loop.  
W--> 188 <400> SEQUENCE: 16  
189 Cys Asp Cys Arg Gly Asp Cys Phe Cys  
190 5  
192 <210> SEQ ID NO: 17  
193 <211> LENGTH: 13  
194 <212> TYPE: PRT  
195 <213> ORGANISM: artificial sequence  
W--> 196 <220> FEATURE:  
197 <223> OTHER INFORMATION: Amino acid sequence of peptide replacing the  
198 RGD coding sequence.  
W--> 199 <400> SEQUENCE: 17  
200 Thr Leu Asn Gly Thr Gln Glu Thr Gly Asp Thr Thr Pro  
201 5 10

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/245,603A

DATE: 11/03/2000  
TIME: 15:41:25

Input Set : A:\PTO.txt  
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L:10 M:283 W: Missing Blank Line separator, <140> field identifier  
L:16 M:283 W: Missing Blank Line separator, <160> field identifier  
L:22 M:283 W: Missing Blank Line separator, <220> field identifier  
L:26 M:283 W: Missing Blank Line separator, <400> field identifier  
L:33 M:283 W: Missing Blank Line separator, <220> field identifier  
L:37 M:283 W: Missing Blank Line separator, <400> field identifier  
L:44 M:283 W: Missing Blank Line separator, <220> field identifier  
L:48 M:283 W: Missing Blank Line separator, <400> field identifier  
L:55 M:283 W: Missing Blank Line separator, <220> field identifier  
L:59 M:283 W: Missing Blank Line separator, <400> field identifier  
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L:188 M:283 W: Missing Blank Line separator, <400> field identifier  
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L:199 M:283 W: Missing Blank Line separator, <400> field identifier